

Energy Transformations Review (part 1)

Grade: 8th

Subject: Physical Science

Date:

1 Energy is the ability to cause change.

2 _____ energy is the energy due to motion.

A Potential

B Waste

C Stored

D Kinetic

- 3 _____ is the transfer of energy that occurs when a force is applied over a distance.

Work

$$W = F \cdot d$$

- 4 Mechanics energy is equal to the total energy of an object due to its motion and interactions.

5 ~~Thermal~~ energy is the energy we get from the sun.

True

False

Radiant
Energy

6 _____ energy is the energy stored in the nucleus of an atom.

Nuclear

7 What type of energy increases when you compress a spring?

A Elastic potential

B kinetic

C radiant

D sound

Heat

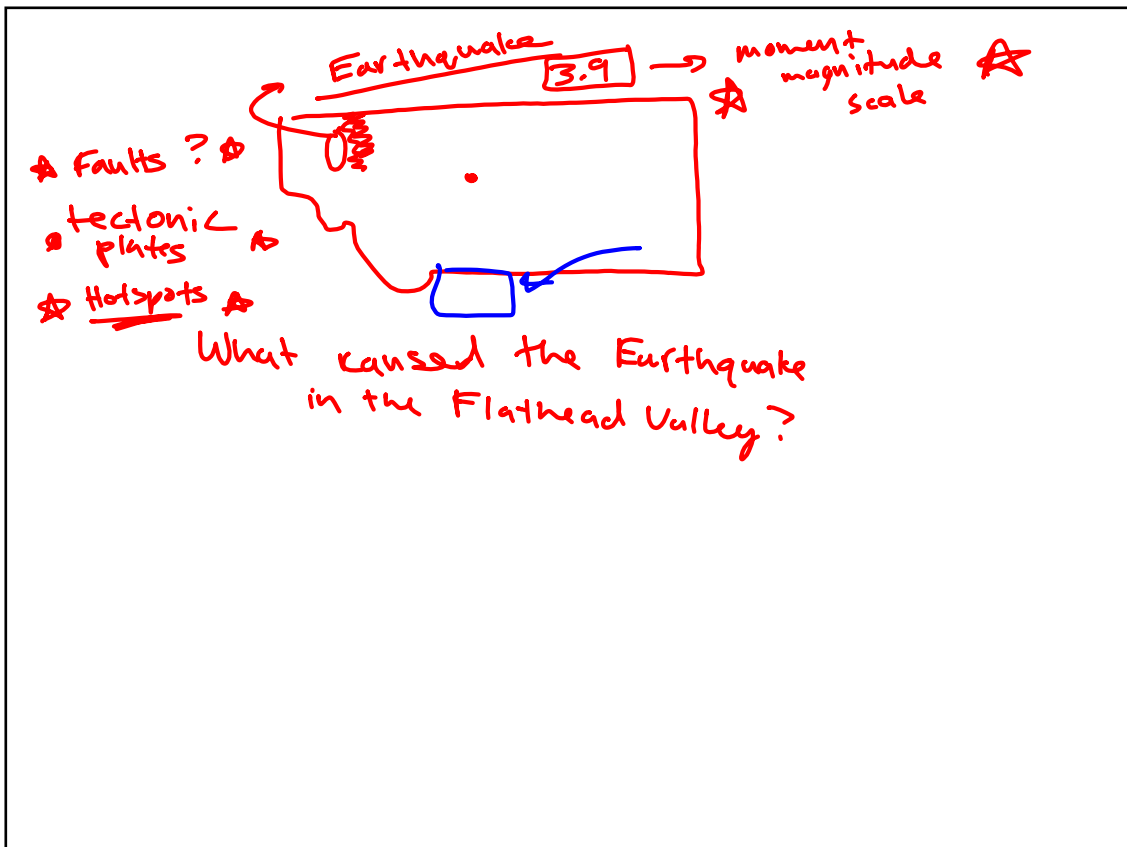
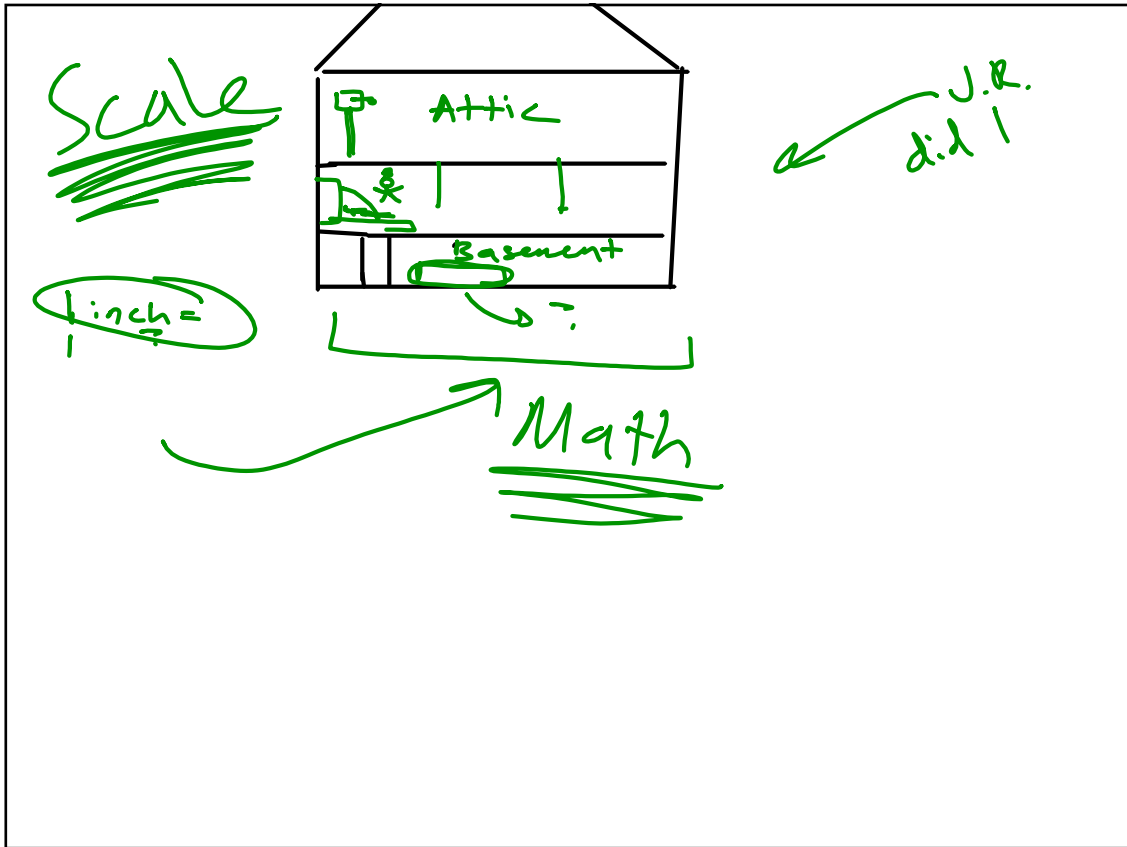
temperature

Bellringer

→ What is the law of conservation of energy?

→ Describe a situation where chemical energy is converted into mechanical energy.

EM
Light → Radiant
Electromagnetic Spectrum? → Electrical Energy

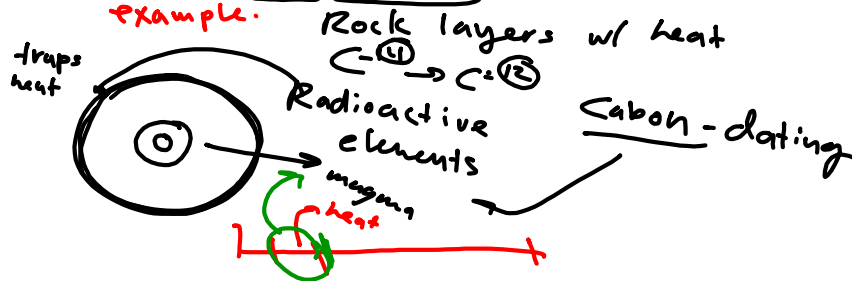


Bellringer

→ What is biomass? Give an example.

Firewood → peat

→ What is geothermal energy? Give an example.



protons nuclei → nucleus
neutrons
cell = billions
atoms

Bellringer

→ What is the most used type of fuel for energy in the U.S?
 $3 \times 10^9 \text{ m/s}$ petroleum →

→ What causes energy to leave most Friction energy systems?

Ex: Brudly is going down a slide...

→ When a fire burns, what kind of energy is given off? Radiant + thermal



Energy Transformations (part 2)

Grade: 8th

Subject: Physical Science

Date:

- 1 Almost all the energy that you use can be traced back to the sun.

☒ True
☐ False

- 2 Fossil fuels are the remains of ancient organisms that can be burned as an energy source.

- 3 A nonrenewable energy resource is an energy resource that is available in limited amounts or that is used faster than it is replaced in nature.

4 A(n) _____ energy resource is an energy resource that cannot be used up.

inexhaustible

5 A _____ energy resource is an energy resource that is replaced as fast as, or faster than, it is used.

renewable

6 Fossil fuels are an inexhaustible energy resource.

True

False

7 Wind energy is an inexhaustible energy resource.

True

False

8 Biomass is a renewable energy resource.

True



False

9 Only 50% of the energy used in the United States comes from nonrenewable energy resources.

True

False

ATP → ADP Bellringer

→ Give 2 examples of an object with potential energy.  

→ Give 2 food examples of " " " "

ME = KE + PE with kinetic energy. 